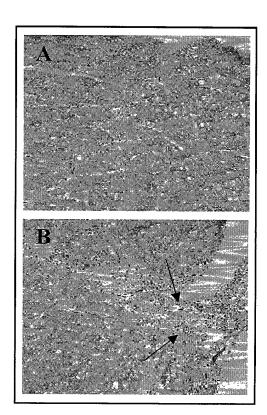
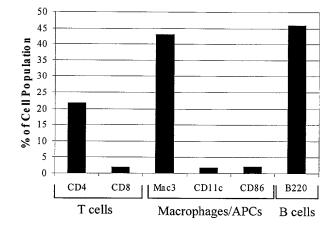
Docket Number: UPN-4105 (M2351)
Title: Compositions and Methods of Using Capsid
Protein from Flaviviruses and Pestiviruses
Inventors: David B. Weiner and Joo-Sung Yang
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Fig. 16A



**Fig. 16B** 

**Fig. 16C** 



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[568] MSKKPGGPGKSRAVNMLKRGMPRVLSLTGLKRAMLSLIDGRGPTRFVLALLAFRFTAIAPTRAVLDRWRSVNKQTAMKHLLSFKKELGTLTSAINRRSSKQKKRGGKTGIAFMIGLIAGVGA> 100 RNTPFNMLKRERNRVSTVQQLTRFSLGMLQGRGPLKLFMALVAFLRFLT1PPTAGILKRWGTIKKSKAINVLRGFRKEIGRMLNILNRR> 90 90 80 70 9 09 20 40 40 30 10 DENZ Cp KJV Cp JEV Cp [220] WNVCp

Figure 17

Docket Number: UPN-4105 (M2351)
Title: Compositions and Methods of Using Capsid
Protein from Flaviviruses and Pestiviruses
Inventors: David B. Weiner and Joo-Sung Yang
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## Fig. 18 Alignment of WNVCp protein sequence to other viral proteins

Search Analysis Search from 1 t Date: June 15,2 Time: 19:48:02	Search Analysis for Sequence: WNVCaa Search from 1 to 123 where origin = 1 Date: June 15,2001 Time: 19:48:02	nce: WNVCaa e origin = 1		Matrix: pam250 matrix Score Region from 1 to 123 Maximum possible score: 590	0 matrix from 1 to ble score:	123 590						
Database:	Database: UserFolder: Alignment-AC6/01	gnment-AC6/0]										
WNVCaa	10 20 30 40 50 60 70 80 90 100 110 12 MSKRPGGPEKSRAVNMLKRGMPRVLST.IGLKRAMI.ST.IDGRGDTBRVI.AITABFFRAAIADWDGGNGRONARMENT GERKEN GENTARDGGGRANARDT TA	20 VNIMI,KRGMPRVI.	30 31.IGI.KRAN	40 T.ST.TDGKGDTR	50 FVT.AT.1.AFF	60 60 TA DITE A TA	7.0 7.0 PWPC:::NEC	80	90	100	110	12

WNVCaa	10 20 30 40 50 10 100 120 120 MSKKPGGPGKSRAVNMLKRGMPRVLSLIGIKRAMLSLIDGKGPIRFVLALLAFFRFTAIAPTRAVLDRWRGVNKQTAMKHLLSFKKELGTLTSAINRRSSKQKKRGGKTGIAVMIGLIASVGA	20 AVNIMILKRG	30 APRVLSLIGLE	KRAMLSLI	40 IDGKGPIRFV	50 Mallaffr	60 FTAIAPTRAV	70 LDRWRGVNK(	80 <b>TAMKHLLSFKI</b>	90 Kelgtlisainf	100 Ainrrsskokkrg	110 RGGKTGIAVM	120 IGLIASVGA
1. HIV-1 89 1. HIV-1 89 [ 41 ] WNVCaa	1. HIV-1 89.6 Vpr protein 1. HIV-1 89. [ 41 ] WNVCaa	g						60 TWTGVEALI        RWRGVNKQT	60 80 90 TWTGVEALIRILQQLLFI-HFR-IGCRHSRIGIIQQRRT-RNG> 	-HFR-IGCF      KELGTLTSA	80 khsrigiiqor         1	90 RRT-RNG> 	
2. Herpes S.	2. Herpes Simplex virus major capsid protein	major cag	sid prote	ņi							VR		
2. HerpesMaj [ 64 ] WNVCaa		160 VKTV-ASALQFGVD- 	70 7D-ALER-GL     11 PRVT,SL,TGL	180 INTVLSVK       KRAMISI.T	190 KLRHAPPMFI 	200 .LQTLADPTF 	210 TERGESKTV] 	220 KSDLIAMFKR 	160	24 DRAENMGSG   11	240   250 SGFSQYSRLSEM	260 IVAAVSGESVL 	KGV>   1   1
													1

3. Ebola nuclear protein

3. EBOLANucl [ 48 ]

WNVCaa